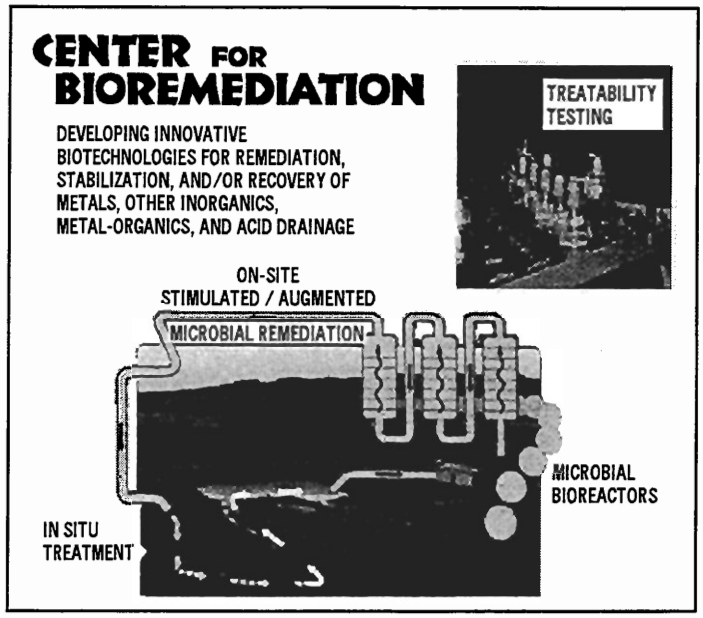
Center for Bioremediation

Director: D. Jack Adams, Ph.D., Weber State University, Ogden, Utah
Phone 626-6058, Fax 626-7467, email: djadams@weber.edu

Bioremediation is the use of biology and technology to clean up environmental pollutants and reclaim soil and water systems.

Background

Established in 1996, to facilitate development, enhancement, and marketing of technologies based on microorganisms, biological materials, and enzyme components for bioremediation and environmental restoration applications. Bioremediation uses reclamation and biotechnology including microbiology. Microorganisms can be thought of as chemical factories, which in the process of growing and reproducing, metabolize and transform organics and inorganics (arsenic, nitrates, etc.) for energy and respiration. In this process metals can be transformed to more stable, less soluble, and/or less toxic states. The Center for Bioremediation develops, implements, and markets innovative biotechnologies to solve one of the most complex and widespread remediation problems - metals contamination.



Technology Development Progress

The center focus is on the commercialization of various aspects of microbial bioremediation technologies including, selenium removal/recovery, arsenic removal/recovery and cyanide destruction. A mobile plant for lead remediation at firing ranges is developed. The center is pursuing partnerships and collaborations with industry, federal agencies and universities in various areas of bioremediation.

Highlights and Accomplishments

A center bioprocess was successfully used, on a commercial scale, to meet discharge criteria for cyanide, selenium, nitrate, and other metals at a Nevada mining operation. A mobile soil treatment plant was successfully demonstrated at Miramar, NAS in California, to clean-up lead from firing range soils

A new company, Applied Biosciences Corp., has been created to collaborate with the center and attract SBIR and STTR funding.

Summary Data:

Current

1996-97 Award	$90,000
Matching Funds	$1,664,200
Patents Pending	0
Patents Issued	0
License Agreements	0
Spin-off Companies	0
Companies Assisted	29
Industry Jobs	2
Center Jobs	10

Cumulative

Awards	$90,000
Matching Funds	$1,664,200
Patents Issued	0
License Agreements	0
Spin-off Companies	1